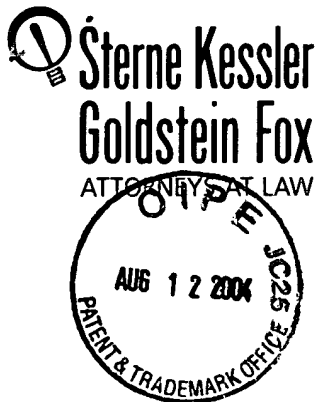


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August 12, 2004

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Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Mail Stop Amendment
Art Unit 2853
Examiner: To Be Assigned
Confirmation No.: 9954

Re: U.S. Utility Patent Application
Application No. 10/815,757; Filed: April 2, 2004
For: **Piezoelectric Thin Film Component, Inkjet Type Recording Head and Inkjet Printer Using This [Piezoelectric Thin Film Component], and Method of Manufacturing Piezoelectric Thin Film Component**
Inventors: SUMI *et al.*
Our Ref: 1089.0260003/ALF

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Information Disclosure Statement;
2. List of Documents cited on Forms PTO/SB/08a and PTO/SB/08b (2 pages); and
3. One (1) return postcard.


It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents
August 12, 2004
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Albert L. Ferro
Attorney for Applicants
Registration No. 44,679

ALF/awt
Enclosures

298328_1.DOC



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

SUMI *et al.*

Appl. No.: 10/815,757

Filed: April 2, 2004

For: **Piezoelectric Thin Film
Component, Inkjet Type Recording
Head and Inkjet Printer Using This
[Piezoelectric Thin Film
Component], and Method of
Manufacturing Piezoelectric Thin
Film Component**

Confirmation No.: 9954

Art Unit: 2853

Examiner: *To Be Assigned*

Atty. Docket: 1089.0260003/ALF

Information Disclosure Statement

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Forms PTO/SB/08a and PTO/SB/08b are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Applicants have listed publication dates on the attached PTO/SB/08a and PTO/SB/08b based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicants have checked the appropriate boxes below.

- ☐ 1. Statement under 37 C.F.R. 1.704(d). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this information disclosure statement.
- ☒ 2. Filing under 37 C.F.R. § 1.97(b). This Information Disclosure Statement is being filed within three months of the date of filing of a national application other than a continued prosecution application (CPA), OR within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, OR before the mailing date of a first Office Action on the merits OR before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No statement or fee is required.
- ☐ 3. Filing under 37 C.F.R. § 1.97(c). This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application.

- ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
- ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
- ☐ c. Attached is our PTO-2038 Credit Card Payment Form in the amount of \$_____ in payment of the fee under 37 C.F.R. § 1.17(p).
- ☐ 4. Filing under 37 C.F.R. § 1.97(d) This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Enclosed find our PTO-2038 Credit Card Payment Form in the amount of \$_____ in payment of the fee under 37 C.F.R. § 1.17(p); in addition:
- ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign

application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).

☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

☐ 5. The document(s) was/were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.

☐ 6. A concise explanation of the relevance of the non-English language document(s) appears below:

☐ 7. Copies of the documents are submitted herewith.

☒ 8. Documents AA1-AM1, FPD1-FPD3, and NPLD1-NPLD6 were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. § 1.98(a)-(c) in Application No. 09/665,314, filed September 19, 2000, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).

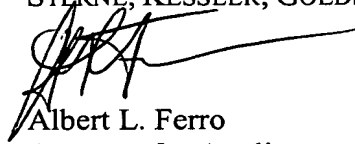
- ☒ 9. No copies of U.S. patents and patent application publications cited on the attached Forms PTO/SB/08a and PTO/SB/08b are submitted in accordance with 1276 OG 55 because this application was filed after June 30, 2003.
- ☐ 10. It is expected that the examiner will review the prosecution and cited art in the parent application no(s). _____ in accordance with MPEP 2001.06(b), and indicate in the next communication from the office that the art cited in the earlier prosecution history has been reviewed in connection with the present application.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO/SB/08a and PTO/SB/08b, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

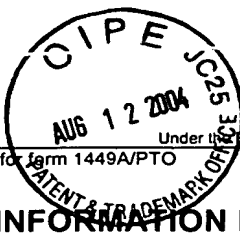
Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.


Albert L. Ferro
Attorney for Applicants
Registration No. 44,679

Date: August 12, 2004

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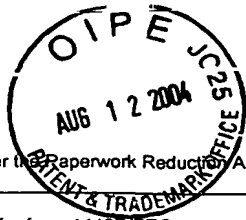
Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	10/815,757
				Filing Date	April 2, 2004
				First Named Inventor	Kouji SUMI
				Art Unit	2853
				Examiner Name	To Be Assigned
Sheet	1	of	2	Attorney Docket Number	1089.0260003/ALF

Exami ner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (If Known)			
	AA1	US-4,668,531	05-26-1987	Asano <i>et al.</i>	
	AB1	US-4,963,390	10-16-1990	Lipeles <i>et al.</i>	
	AC1	US-5,116,643	05-26-1992	Miller <i>et al.</i>	
	AD1	US-5,130,103	07-14-1992	Yamagata <i>et al.</i>	
	AE1	US-5,198,269	03-30-1993	Swartz <i>et al.</i>	
	AF1	US-5,320,907	06-14-1994	Sato	
	AG1	US-5,644,838	07-08-1997	Beratan	
	AH1	US-5,650,362	07-22-1997	Nashimoto	
	AI1	US-6,001,416	12-14-1999	Moriyama <i>et al.</i>	
	AJ1	US-6,056,994	05-02-2000	Paz de Araujo <i>et al.</i>	
	AK1	US-6,066,581	05-23-2000	Chivukula <i>et al.</i>	
	AL1	US-6,174,564 B1	01-16-2001	Scott <i>et al.</i>	
	AM1	US-6,194,227 B1	02-27-2001	Hase	
	AN1	US-6,343,855 B1	02-05-2002	Sakamaki <i>et al.</i>	

FOREIGN PATENT DOCUMENTS						
Examin er Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ⁴ Kind Code ⁵ (in known)				
	FPD1	EP 0 932 209	07-28-1999	Seiko Epson Corp.		
	FPD2	JP 2-281769	11-19-1990	Oki Electric Ind. Co. Ltd.		
	FPD3	JP 6-40035	02-15-1994	NGK Insulators LTD		

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.
This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete If Known			
		Application Number	10/815,757		
		Filing Date	April 2, 2004		
		First Named Inventor	Kouji SUMI		
		Art Unit	2853		
		Examiner Name	To Be Assigned		
Sheet	2	of	2	Attorney Docket Number	1089.0260003/ALF

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	NPLD1	Chung <i>et al.</i> , "Electrode Stress Effects on Electrical Properties of PZT Thin Film Capacitors", Applications of Ferroelectrics, ISAF 1994, Proceedings of the Ninth IEEE International Symposium, pp. 527-530, August 1994.	
	NPLD2	Yamaguchi <i>et al.</i> , "Ultrasonic Properties of PZT Thin Films in UHF-SHF Ranges - Prepared Sol-Gel Method", Frequency Control Symposium, 1997, Proceedings of the 1997 IEEE International Symposium, pp. 544-551, May 1997.	
	NPLD3	Klee, M, <i>et al.</i> , "Analytical Study of the Growth of Polycrystalline Titanate Thin Films", Philips Journal of Research, Vol. 47, Nos. 3-5:263-285 (1993).	
	NPLD4	Kumar <i>et al.</i> , "Lead Zirconate Titanate Films by Rapid Thermal Processing", Appl. Phys. Lett. 58 (11), March 18, 1991, pp. 1161-1163.	
	NPLD5	Reaney <i>et al.</i> , "Use of Transmission Electron Microscopy for the Characterization of Rapid Thermally Annealed, Solution-Gel Lead Zirconate Titanate Films", Journal of the American Ceramic Society, Vol. 77, No. 5, pp. 1209-1216 (1994).	
	NPLD6	Gary S. Snow, "Fabrication of Transparent Electrooptic PLZT Ceramics by Atmosphere Sintering", 56 Journal of the American Ceramic Society, pp. 91-96 (1973).	

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with M PEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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